

## TABLE OF CONTENTS

### *Vol. 47 No. 1 1989/90*

C. L. GOUDAS, M. LEFTAKI and E. G. PETSAGOURAKIS / Motions in the Field of Two Rotating Magnetic Dipoles. III: Zero-Velocity Curves and Surfaces	1
COLETTE EDELMAN / Rectifications Régularisantes du Problème des Deux Corps	15
RICHARD A. SERAFIN / Orbital Element Distributions in the Oort Cloud	37
MICHAEL E. HOUGH / Intrinsic Orbital Coordinates on a Hamiltonian Surface	57
N. D. CARANICOLAS / A Mapping for the Study of the 1/1 Resonance in a Galactic Type Hamiltonian	87

### *Vol. 47 No. 2 1989/90*

Editorial Note	97
JACQUES HENRARD and N. D. CARANICOLAS / Motion Near the 3/1 Resonance of the Planar Elliptic Restricted Three Body Problem	99
B. CHAUVINEAU and F. MIGNARD / Generalized Hill's Problem: Lagrangian Hill's Case	123
ALESSANDRO MORBIDELLI and ANTONIO GIORGILLI / On the Dynamics in the Asteroids Belt. Part I: General Theory	145
ALESSANDRO MORBIDELLI and ANTONIO GIORGILLI / On the Dynamics in the Asteroids Belt. Part II: Detailed Study of the Main Resonances	173
JOACHIM HEIMBERGER, MICHAEL SOFFEL, and HANNS RUDER / Relativistic Effects in the Motion of Artificial Satellites: The Oblateness of the Central Body II	205
J. SCHASTOK, M. SOFFEL, and H. RUDER / Numerical Derivation of Forced Nutation Terms for a Rigid Earth	219

*Vol. 47 No. 3 1989/90*

R. VILHENA DE MORAES and P. A. F. DA SILVA / Influence of the Resonance in a Gravity-Gradient Stabilized Satellite	225
J. CASASAYAS and A. NUNES / A Restricted Charged Four-Body Problem	245
S. ALAN STERN / External Perturbations on Distant Planetary Orbits and Objects in the Kuiper Disk	267
CHONG-QING CHENG and YI-SUI SUN / Existence of Invariant Tori in Three-Dimensional Measure-Preserving Mappings	275
CHONG-QING CHENG and YI-SUI SUN / Existence of Periodically Invariant Curves in 3-Dimensional Measure-Preserving Mappings	293

*Vol. 47 No. 4 1989/90*

ALEX KONOPLIV / A Perturbation Method and Some Applications	305
SEPPO MIKKOLA and JARMO HIETARINTA / A Numerical Investigation of the One-Dimensional Newtonian Three-Body Problem. II: Positive Energies	321
ARMANDO BAZZANI, STEFANO MARMI, and GIORGIO TURCHETTI / Nekhoroshev Estimate for Isochronous Non Resonant Symplectic Maps	333
DANIEL G. BENEST / P/Ge-Wang Joins P/Slaughter-Burnham and P/Boethin in the Club of Comets in 1/1 Resonance with Jupiter	361
SEPPO MIKKOLA and SVERRE J. AARSETH / A Chain Regularization Method for the Few-Body Problem	375
JACQUES HENRARD and MASSAE SATO / The Origin of Chaotic Behaviour in the Miranda-Umbriel 3:1 Resonances	391

